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ABSTRACT

This report, fourth in the New York-New Jersey Port Authority's series of analyses of 1990 census data, explores correlations between educational attainment and economic opportunity in the New York-New Jersey metropolitan region. Reviewing census data for the region's adults (persons aged 25 and over makes clear the singular importance of education in determining economic outcomes. The median income of college graduates is 80 percent higher than that of high school graduates. In turn, the median income for high school graduates is almost 60 percent higher than that of persons without a high school diploma. More than 80 percent of college graduates are employed, but less than 40 percent of those who did not complete high school are employed. The incidence of poverty is heavily concentrated at the bottom of the ladder of educational attainment. The economic advantages of increased education accrue to all racial and ethnic groups and to both sexes. Findings suggest that increasing students' educational attainment is the most effective economic-development strategy the New York-New Jersey area can pursue. Fourteen tables and 11 figures illustrate the discussion. (SLD)

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FOREWORD

The value and benefits of education - both to the individual and to society as a whole - have long been recognized by social scientists and policy makers. This report - the fourth in the Port Authority's series of analyses of the 1990 Census - dramatically underscores that reality. In fact, this look at the correlation between educational attainment and economic opportunity in the New York - New Jersey metropolitan region offers compelling evidence that the value of obtaining as much education as possible has never been greater. More than ever, educational attainment is the single most important determinant of economic success.

This is the fourth in the series of Demographic Trends reports on the 1990 Census. These reviews are intended to provide policy - and decision-makers at the Port Authority and around the region with a keener understanding of the key dimensions of demographic change in the metropolitan region. Grasping the dimensions and forces that have been reshaping the population profile of this immense, diverse region of 15 million people will help officials and planners better prepare for its future, both economically and socially. It is our hope that these insights will contribute to better decision-making in the region in terms of public policy and public investment. At the Port Authority, this information is a basic element of sound business planning.

The previous three editions of Demographic Trends dealt with the subjects of the region's racial and ethnic diversity, the characteristics of the region's 16-19 year-old cohort, and the regional distribution of income and poverty. In our last report, on income distribution and poverty, we noted the alarming trend that the gap between rich and poor had grown notably wider during the 1980s. With this report, it becomes clear that educational attainment is the critical factor determining which side of that gap people find themselves. Reviewing the Census data for the region's adults, 25 years old and over (we selected this age group because, typically, its members have completed their formal education), the singular importance of education in determining economic outcomes is underscored and reinforced no matter what perspective one views the data from:

The median income of college graduates is 80 percent higher than for high school graduates, and for high school graduates median income is almost 60 percent higher than for those without a high school diploma.

Education dramatically improves employment opportunities, with more than 80 percent of the region's college graduates employed. Conversely, lack of educational attainment increases the prospects of unemployment: less than 40 percent of those who did not complete high school are employed.

The incidence of poverty is heavily concentrated at the bottom of the educational attainment ladder, and declines sharply with each successive rung of schooling.

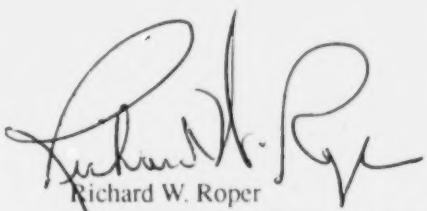
During the 1980s, real income growth was entirely captured by those with more education - as much as 10 percent growth in median individual income for college graduates - while those with less schooling suffered sharp income declines - exceeding 25 percent for those without a high school diploma.

The economic advantages of pursuing education accrue to all racial and ethnic groups and to both sexes, although the higher one rises up the educational ladder, the wider the income gulfs between Whites and minorities and between men and women become.

The region's Asian population leads all ethnic and racial groups in overall educational attainment, with more than 40 percent holding bachelor degrees, compared to 29 percent for Whites, 13 percent for Blacks and 9 percent for Hispanics.

The more education one has, the more likely that person will find work in a management or professional occupation. Less edueation more often means working in manufacturing or retail trade occupations.

These findings are of particular interest to those in New York and New Jersey looking to find ways to advance the region's economic development. That very question was high on the agenda of a recent series of policy roundtables sponsored by the Port Authority that attempted to look at the region and its major public investment needs over the next quarter century or so. Experts from a variety of disciplines agreed that social equity, widening opportunity for all our residents, and workforce skills and readiness were essential elements to maintaining an economically competitive and prosperous region in the 21st century. This report suggest that finding ways to increase educational attainment levels among all our citizens is quite possibly the most effective economic development strategy the region can pursue.



Richard W. Roper
Director, Office of Economic and Policy Analysis

Analysis of Key Findings From The 1990 Census of Population

Demographic Trends in the NY - NJ Metropolitan Region

Educational Attainment and Economic Opportunity

Introduction ■

Social science has recently stressed the growing, direct link between education and economic well being. This report tests that proposition from the standpoint of the New York-New Jersey metropolitan region, using data from the 1980 and 1990 Census of Population. Comparing the region and its principal geographic sectors to the nation as a whole, including comparisons based on race and gender, this study evaluates the relationship of education to income levels, employment status, poverty rates, occupation and industrial sectors.

This study concludes that educational attainment is a clear and probably decisive determinant of economic opportunity and well-being, and that education, more than ever, represents the surest path out of poverty.

Summary ■

Educational attainment is a clear determinant of an individual's income level. The median income for the region's high school graduates was 59 percent higher than those without a high school diploma , and the median income for persons with a bachelor's degree was 80 percent higher than for high school graduates.

Education is the best route out of poverty. The region's high school graduates were half as likely to live in poverty as dropouts.

The least educated members of the labor force experienced a decline in real income in the decade of the 1980s, totaling as much as 25 percent for those without a high schoool diploma.

The financial benefits of additional education accrue to all, regardless of race or ethnicity. Median income for each group was at least 60 percent higher for college graduates than for high school graduates.

The gap in median income between the region's Whites and minorities widens as educational attainment rises. For example, Black high school dropouts earn 10 percent less than White dropouts while Black's who hold a Bachelor's Degree earn over 20 percent less than Whites with similar education.

Income of males was higher than that of females at every education level. The median income for male high school graduates was $25,800 compared to $14,200 for females; the median for males with a bachelor's degree was $40,600 contrasted to $26,800 for females.

Low labor force participation rates and high unemployment rates are strongly correlated with low levels of educational attainment. For example, almost 39 percent of adults with less than a high school diploma are employed contrasted to almost 84 percent for those with advanced degrees.

Compared to the nation as a whole, the region has a disproportionate share of both uneducated and highly educated individuals.

Higher levels of education were attained in the suburban sectors of the region. In New York City almost 32 percent of the adult population failed to complete high school in contrast to about 17 percent in the New York suburbs and about 24 percent in the New Jersey sector.

Minorities lag the White population in educational attainment. About 22 percent of the White population failed to complete high school contrasted to around 35 percent for Blacks and 49 percent for Hispanics.

Manufacturing was the prime source of employment for the least educated in the region, underscoring the importance of retaining factory jobs.

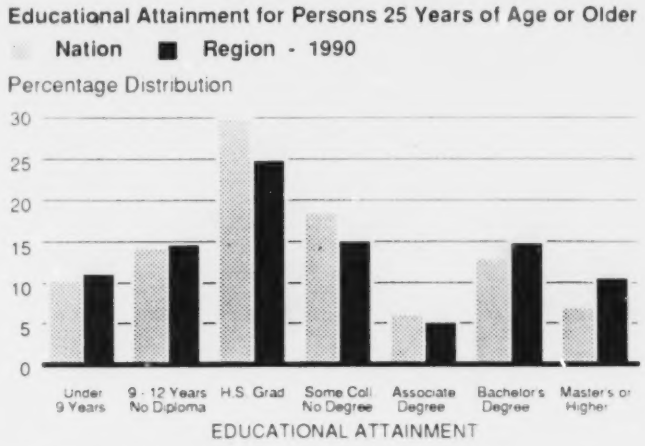
NOTE: This study examined educational attainment for persons 25 years of age and older. This age group was selected because its members typically have completed their formal education.

The Region Has Disproportionately More Uneducated and More Highly Educated than the Nation as a Whole

The region tends to be proportionately higher than the nation at both ends of the spectrum of educational attainment for persons 25 years of age and over. The share of population with less than a high school diploma registered 26.0 percent for the region compared to 24.8 percent nationwide.

Recipients of the Bachelor's degree (but no additional degrees) accounted for 13.1 percent of the nation's adult population but 14.9 percent of the region's. The greatest difference between the nation and the region was in the proportion of the population that has earned a graduate or professional degree. Of the region's population, 10.7 percent possessed graduate or professional degrees, significantly higher than the 7.2 percent registered in the nation.

Educational Attainment for Persons 25 Years of Age or Older



SOURCE: 1990 Census of Population, U.S. Bureau of the Census

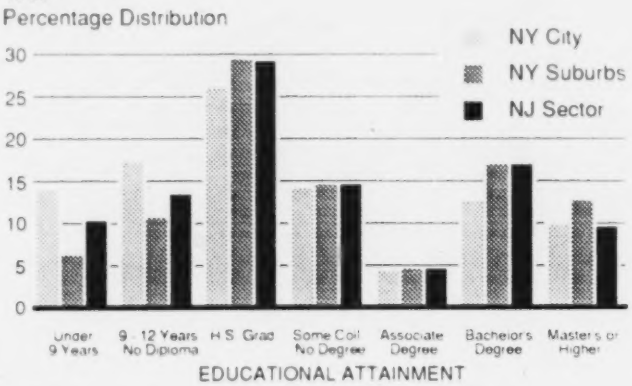
Suburbanites Better Educated Than City Dwellers

Residents of the suburbs attained higher levels of education than did the urban areas. In New York City, 31.7 percent of the adult population failed to obtain a high school education contrasted to 17.3 pecent in the New York Suburbs and 24.1 percent in the New Jersey Sector.

At the high end of the education distribution, 23.0 percent of the city's population earned at least a Bachelor's degree compared to 29.1 percent for residents in the New York suburbs and 26.9 percent in the New Jersey Sector.

In New York City, the percent of the population 25 and over who obtained graduate or professional degrees were almost as high as the percent holding Bachelor's Degrees. - 10 verses 12.9 percent. In the suburbs the differences are much greater.

Educational Attainment for Persons 25 Years of Age or Older
SECTORS
1990



SOURCE: 1990 Census of Population, U.S. Bureau of the Census

The large prevalence of medical, law, dental and graduate schools in New York City is possibly the reason for the relatively large number of city residents with graduate and professional degrees.

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Education Is The Clear Path To Higher Incomes

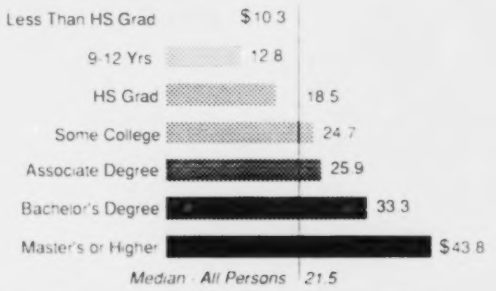
Education really does pay off. While the median income of all adults 25 years and over with cash income in the region was $21,572, the income for persons with less than nine years education was only $10,371. The median income of high school graduates was 79 percent higher than the latter figure and the median for holders of a Bachelor's Degree was 80 percent higher than the $18,544 recorded by high school graduates.

The evidence is compelling. Over 70 percent of adults with less than nine years of education earn less than $15,000 per year. Almost 60 percent of the population with nine to twelve years of education earn less than $15,000. In fact, only 1 out of 20 residents without a high school diploma earns more than $40,000 per year.

At the upper end of the education distribution, over one-half of persons with a graduate or professional degree earned $40,000 or more, compared to 38 percent for college graduates and 22 percent for Associate Degree holders. Only 12.4 percent of high school graduates are in this upper income group. The high school degree makes a huge difference in getting jobs in the $20,000 - $40,000 pay range. (See Appendix Table 8.)

A study by the U.S. Bureau of the Census on the value of education nationwide showed that the average monthly income of high school graduates was more than double that of non-graduates. In general, the more education a person receives the higher the paycheck. This is clearly true for the New York-New Jersey region where about one out of five residents with a Master's Degree or higher earned income over $75,000. Only one out of ten residents with a Bachelor's Degree earned more than $75,000. Without a college degree, the opportunity to obtain a higher-paying position is minimal.

Median Income of Persons 25 and Over - 1990
By Educational Attainment - In the Region
In Thousands of Dollars



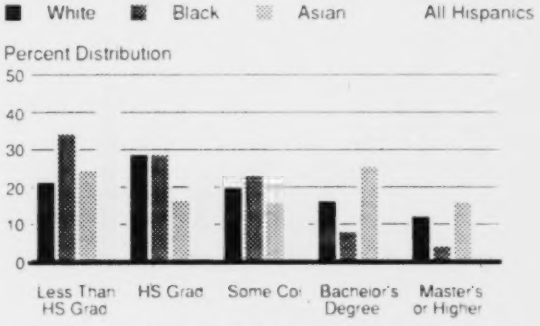
NOTE: This chart only includes persons with cash income
SOURCE: 1990 Census of Population, U.S. Bureau of the Census

Minorities Lag The White Population in Educational Attainment

The White population recorded higher educational levels than did the region's dominant minority groups. While 29 percent of white adults possessed at least a Bachelor's Degree, only 13 percent of Black adults and 9 percent of Hispanics attained that educational level. Over 40 percent of Asian/Pacific Islanders held Bachelor's Degrees or higher.

At the lower end of the educational spectrum, 22 percent of the White population failed to complete high school compared to 35 percent of Blacks, an extraordinarily high 49 percent of Hispanics and about 25 percent of Asian/ Pacific Islanders.

Educational Attainment in the Region
By Race - 1990

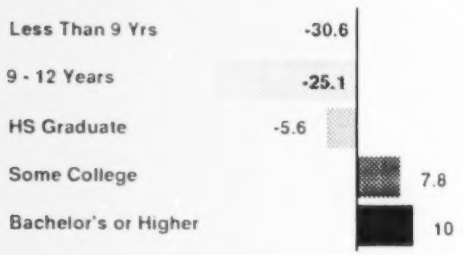


SOURCE: 1990 Census of Population, U.S. Bureau of the Census

Uneducated Lost Real Income During 1980s As Better Educated Gained

The financial value of additional education expanded significantly during the 1980's. Between 1980 and 1990, the region's adults who lacked a high school diploma suffered dramatic declines in real income: the median real income of adults with less than 9 years of schooling decreased by 30 percent while the reduction was 25 percent for those with 9 to 12 years education. The median income of high school graduates fell by a moderate 5.6 percent.

Percent Change in Real Individual Income by Education , 1990 vs 1980
In the Region - 25 Years of Age and Older



In sharp contrast, incomes of the region's adults with at least some college recorded real income gains. Adults with some college posted a median real income growth of 7.8 percent while the real median income of adults with a Bachelor's Degree or higher grew by a robust 10 percent.

Consequently, the income gap between the uneducated and the educated widened dramatically during the decade. Whereas the median income for high school graduates surpassed the median for drop-outs by 24 percent in 1980, the ratio soared to 59 percent in 1990. Similarly, while the median income for adults with at least a college diploma was 70 percent higher than high school graduates in 1980, it was double in 1990.

The widening income gap based on educational level is a major challenge facing the nation and the region. The educational level of the region's residents must rise in order to obtain the skills needed to be competitive in today's workplace.

Median Individual Income For Persons 25 Years and Over By Education, In The Region, 1980 vs 1990 (Dollars)

Education	1980 In Current $	1980 In Constant '90 $	1990
Less That 9 Years	$8,444	$14,936	$10,371
9-12 Years, No Diploma	9,666	17,128	12,831
High School Graduate	11,090	19,651	18,544
Some College	13,101	23,215	25,017
Bachelor's Degree or Higher	19,071	33,794	37,158
Total	11,490	20,360	21,572

NOTE: This table only includes persons with cash income.
1980 Current Dollars are inflated by the Regional Consumer Price Index
SOURCE: 1980, 1990 Census of Population, U.S. Bureau of the Census

The financial reward of additional education was extensive irrespective of race or ethnicity. The median income of college graduates with just Bachelor's Degrees was over 80 percent higher than that of high school graduates for Whites and Asian/Pacific Islanders. For Blacks and Hispanics, the gap was between 60 and 63 percent.

Adults Earning Under $20,000 and over $40,000 By Race/Hispanic Ethnicity and Specified Degrees In The Region -1990
(Percent)

	HS Grad	Associate Degree	Bachelor's Degree
WHITES			
Under $20,000	51.2	32.4	22.7
$40,000 or more	14.6	26.9	41.5
BLACKS			
Under $20,000	59.6	39.9	26.4
$40,000 or more	6.1	12.5	20.9
ASIAN/PACIFIC ISL			
Under $20,000	66.1	46.5	32.2
$40,000 Or More	7.0	18.0	27.7
HISPANICS			
Under $20,000	63.3	50.3	34.0
$40,000 or more	6.1	10.9	20.4

NOTE: Hispanics may be of any race.
This table only includes persons with cash incomes.
SOURCE: 1990 Census of Population, U.S. Bureau of the Census

While the value of incremental education in terms of income is universal, there are still income gaps among different races and ethnic groups with the same educational attainment. To illustrate, the White population with a Bachelor's Degree had a median income of $35,223 or 27 percent higher than Blacks holding a Bachelor's Degree and 37 percent higher than Hispanic college graduates.

The gap between the median income of Whites and the region's minorities widens as the educational level rises. The differences are small for the least educated. For persons with less than 9 years of schooling, the median income of both Blacks and Hispanics was 95 percent of Whites, a proportion that declines as the educational level increases. For example, Black high school graduates recorded a median income 87.8 percent of Whites with the same education. Blacks with a Bachelor's Degree only recorded a median income 78.5 percent of Whites, or more than 20 percent less than Whites with similar education. Similar results prevail for Hispanics: the ratio for high school graduates is 80.9 percent compared to 73.0 percent for holder's of Bachelor's Degrees.

Median Income by Race/Hispanic Ethnicity and Educational Attainment In The Region 1990 (Dollars)

Education	Whites	Blacks	Share of Whites (%)	Asian & Pacific Islanders	Share of Whites (%)	Hispanics	Share of Whites (%)
Less That 9 Years	**$10,634**	**$10,140**	*95.4*	**$9,728**	*91.5*	**$10,149**	*95.4*
9-12 Years, No Diploma	**13,553**	**12,162**	*89.7*	**12,039**	*88.8*	**11,802**	*87.1*
High School Graduate	**19,510**	**17,138**	*87.8*	**15,177**	*77.8*	**15,777**	*80.9*
Some College	**26,981**	**20,788**	*77.0*	**20,384**	*75.5*	**19,475**	*72.2*
Associate Degree	**27,829**	**23,343**	*83.9*	**21,699**	*78.0*	**19,918**	*71.6*
Bachelor's Degree	**35,223**	**27,648**	*78.5*	**28,307**	*80.4*	**25,724**	*73.0*
Master's or Higher	**45,739**	**35,736**	*78.1*	**37,120**	*81.2*	**32,997**	*72.1*
Total	**24,198**	**17,345**	*71.7*	**14,853**	*61.4*	**14,165**	*58.5*

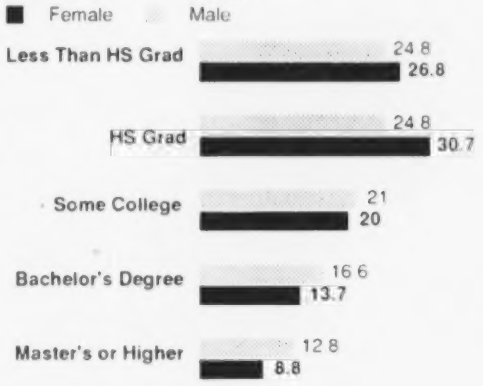
NOTE: This table only includes persons with cash income.
SOURCE: 1990 Census of Population, U.S. Bureau of the Census

Whites with high school degrees recorded the highest proportion of any group - 14.6 percent - with incomes of $40,000 or more. The proportion grows to 26.9 percent for Whites with Associate Degrees and 41.5 percent for holders of Bachelor Degrees. Only 6.1 percent of Blacks with high school diplomas earned $40,000 or more, a proportion that increases to 12.5 percent for Associate Degree holders and to 20.9 percent for college graduates. About the same proportion of Hispanics as Blacks earned $40,000 or more for holders of each of the the three certificates. But Hispanics registered a higher proportion than Blacks with income under $20,000 for all three education levels. Thirty-four percent of Hispanics with Bachelor Degrees earned less than $20,000 contrasted to 26.4 percent for Blacks with the same education level. Asian/Pacific Islanders also benefited from additional education. Whereas only 7.0 percent of high school graduates earned $40,000 or more, that proportion grows to 27.7 percent for college graduates with only Bachelor's Degrees.

Educational Attainment is Higher For Males Than Females

Males tend to attain higher levels of education than females. Almost 30 percent of males in the region possess at least a Bachelor's Degree compared to 22.5 percent of females. Recent college enrollment data, however, indicate that this gap is closing for the younger population. The gender gap for higher education is larger in the suburbs than in New York City. In the New York Suburbs, 33.6 percent of males held at least a Bachelor's Degree compared to 25.3 percent of females. In New York City, the corresponding proportion were 25.7 percent for males and 20.7 percent for females.

Educational Attainment By Gender
In the Region - 25 Years of Age and Older
1990 - Percent Distribution



SOURCE: 1990 Census of Population
U.S. Bureau of the Census

Income of Males Exceeds That of Females at Every Level of Education

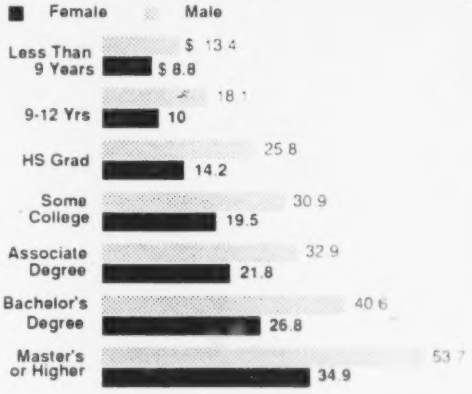
Males are compensated more for educational attainment than females. At every level of education, the median income for males in the region surpassed the income for females by a large margin. For example, males with less than nine years of education registered a median income of $13,380, exceeding the female median of $8,801. Similarly, males with advanced degrees posted median earnings of $53,720 contrasted to $34,870 for highly educated females.

Males have benefited from both the possession of a high school diploma and a Bachelor's Degree more than females. Over 50 percent of females with a high school diploma earned under $15,000 while only 25.3 percent of males were at that low income level. Almost 12 percent of males but only 1.9 percent of females had incomes of $50,000 or more.

The gender differences were as vast for college graduates: 36.5 percent of males earned $50,000 or more contrasted to 12.2 percent of females.

Contributing to the gender gap is a large number of male-oriented jobs in construction and manufacturing that are relatively high-paying even for the uneducated.

Median Income of Males & Females In The Region, By Educational Attainment
1990, In Thousands of Dollars



NOTE: This chart only includes persons with cash income.
SOURCE: 1990 Census of Population, U.S. Bureau of the Census

Personal Income of HS Graduates and Bachelor's Degree Holders
***Females* vs Males, 25 Years of Age and Older**
In The Region -1990
(Percent Distribution)

	High School Graduates		Bachelor's Degree Holders	
	Females	Males	*Females*	Males
Under $15,000	*52.8*	25.3	*24.2*	10.8
$15,000 - 19,999	*14.9*	11.6	*8.9*	5.3
$20,000 - 29,999	*20.5*	22.8	*24.7*	15.5
$30,000 - 39,999	*7.6*	18.0	*19.3*	17.6
$40,000 - 49,999	*2.3*	10.6	*10.7*	14.3
$50,000 - 59,999	*0.9*	5.5	*5.1*	10.8
$60,000 - 74,999	*0.6*	3.3	*3.7*	9.2
$75,000 and Over	*0.4*	2.9	*3.4*	16.5
Total	*100.0*	100.0	*100.0*	100.0

NOTE: This table only includes persons with cash income.
SOURCE: 1990 Census of Population, U.S. Bureau of the Census

More School = Less Poverty

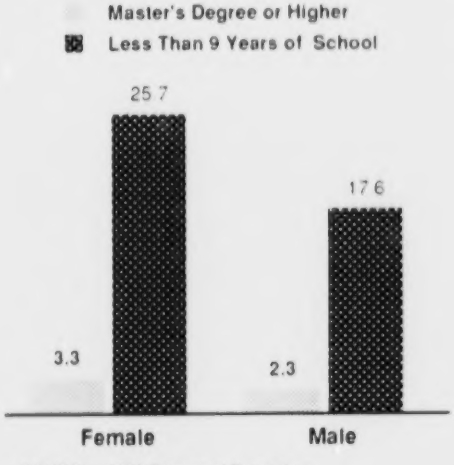
Additional education is the most certain route out of poverty. Over 20 percent of the region's adult population who lacked a high school diploma lived below the poverty line. For high school graduates, the poverty rate declined markedly to register 9.1 percent. Over half of the region's adults living in poverty failed to graduate high school. Clearly, a high school education is crucial for rising out of poverty.

The poverty rate drops to 6.7 percent for adults with some college, to 5.7 percent for holders of an Associate Degree and to under 4 percent for holders of at least a Bachelor's Degree. (See Appendix Table 3)

Poverty levels in New York City were substantially higher than in the two suburban sectors - 15.1 percent for New York City contrasted to 6.4 percent for the New Jersey Sector and 4.2 percent in the New York suburbs. The same general patterns of educational attainment prevails for all sectors, i.e. the poverty rate decreases as education rises. For example, in New York City, adults without a high school diploma posted a poverty rate of about 26 percent compared to 13.9 percent for high school graduates and 5.6 percent for Bachelor's Degree holders. In the New York Suburbs, adults without a high school diploma posted a poverty rate of 10 percent while graduates had the small rate of 4.3 percent.

Uneducated females have a substantially higher poverty level than uneducated males, suggesting that schooling is even more critical for women to rise from poverty than for men. In the region, 25.7 percent of females with less than nine years of schooling were living in poverty contrasted to 17.6 percent for males; females attaining between nine and twelve years of schooling posted a 23.9 percent poverty rate compared to 14.1 percent for males. The large number of females raising children by themselves partially explain this gender gap.

Poverty Rates vs. Education, By Gender
In the Region - 25 Years of Age and Older
1990 - **Percent in Poverty**



SOURCE: 1990 Census of Population
U.S. Bureau of the Census

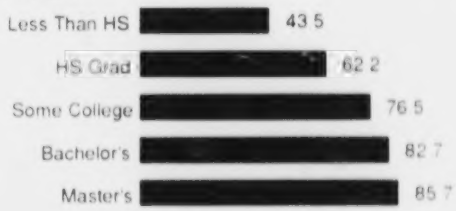
Lower Unemployment & Higher Labor Force Participation Rates

Labor force participation is largely a function of educational attainment: the more education individuals have, the better their chances of successfully participating in the economy. Conversely, less education markedly increases the likelihood of being jobless. The most uneducated of the region's population - those with less than a high school diploma - had severe labor force distress. Of this group, only 43.5 percent were labor force participants, of which 11.2 percent were unemployed. Thus, only 39.1 percent of this education group were working.

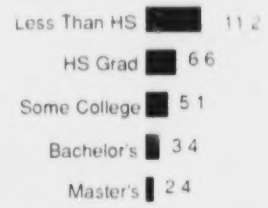
A higher labor force participation and lower unemployment occurred with each higher education group. For the highly educated group with advanced degrees, a participation rate of 85.7 percent was achieved while the unemployment rate was a minuscule 2.4 percent. The biggest jump was recorded in the difference between high school graduates and high school dropouts, underscoring the enormous value of a high school
diploma.

The same general pattern of more education creating labor force success prevails in New York City as in the suburbs. New York City consistently posted greater levels of labor force and employment distress than did the suburbs. For example, high school graduates recorded an 8.5 percent unemployment rate in New York City, 4.3 percent in the New York suburbs and 5.8 percent in the New Jersey sector.

Labor Force Participation - 1990
by Educational Attainment, In the Region
25 Years of Age and Older
Percent



Unemployment Rate - 1990
by Educational Attainment, In the Region
25 Years of Age and Older
Percent



SOURCE: U S Bureau of the Census
1990 Census of Population

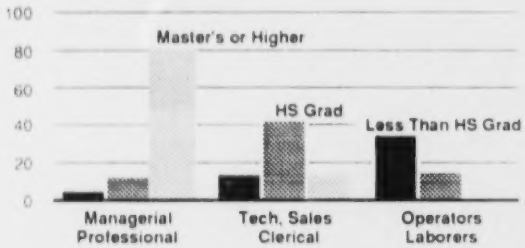
Highly Educated Workers are Employed Primarily in Managerial and Professional Occupations

The occupation of workers is highly related to their educational attainment. Eighty percent of regional workers with advanced or professional degrees are in the managerial and professional occupations. Of the region's college graduates with only a Bachelor's Degree, 57 percent were in managerial and professional occupations and 32 percent in technical or sales.

The largest proportion - 41.3 percent - of owners of Associate Degrees were in the technical, sales and clerical occupations, followed by 34.3 percent in managerial and professional occupations.

The least-educated workers were primarily employed in service occupations, which are generally low-paying, and operators, fabricators and laborer occupations. About two-thirds of workers with less than nine years of schooling and over half of workers with 9 to 12 years of schooling are in these occupations. The primary occupation for high school graduates was technical, sales and clerical, accounting for over 40 percent of employment. (See Appendix Table 9.)

Selected Occupations by Educational Attainment
Percent Distribution - 1990



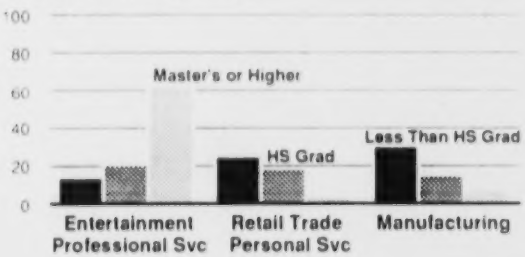
Manufacturing and Retail Trade Provide Jobs for Less Educated Workers

The industry in which people obtain employment is also primarily a function of their educational attainment. Manufacturing provides many jobs for the least educated of the region's workers. For those with less than nine years of schooling, manufacturing provided work for the largest proportion - 30.1 percent. For workers with 9 to 12 years of schooling, 20.3 percent were employed in manufacturing.

These findings underscore the importance of manufacturing to the region and the adverse affects of the severe decline in manufacturing jobs on income levels of the least educated in the labor force. Retail trade was also a important source of employment for the uneducated, providing jobs for over 17 percent of the workforce who lacked a high school diploma.

Entertainment, recreation and professional services is a major regional industry providing employment for 28.3 percent of workers. Since it includes legal, health and educational services, it provides a high proportion of jobs for the most educated of the workforce: 62.3 percent of holders of graduate or professional degrees, 32.8 percent for holders of Bachelor's Degrees and 30.8 percent for Associate Degree holders. The industry also provides jobs for a significant proportion of the less educated since it includes such jobs as nurses' aides and porters in Health Care Facilities. (See Appendix Table 10.)

Selected Industries by Educational Attainment
Percent Distribution - 1990



Note: The above two sections exclude persons who never worked or last worked prior to 1985.

STATISTICAL COMPENDIUM

1. **Educational Attainment** for Persons 25 Years of Age and Older in the Nation, Region and Sectors in 1990

2. **Educational Attainment by Race and Hispanic Ethnicity** in the Region in 1990

3. **Poverty Status for Persons 25 Years of Age and Older** in the Region and Sectors in 1990

4. **Poverty Rates of Males and Females** 25 Years of Age and Older in the Region by Educational Attainment in 1990

5. **Education by Gender** for Persons 25 Years of Age and Older in the Region and Sectors in 1990

6. **Labor Force Participation Rates by Educational Attainment** for Persons 25 Years of Age and Older in the Region and Sectors in 1990

7. **Unemployment Rates by Educational Attainment** For Persons 25 Years of Age and Older, In the Region and Sectors in 1990

8. **Individual Income Of Persons 25 Years and Older** by Educational Attainment in the Region in 1990

9. **Occupation of Persons** 25 Years of Age and Older Employed in the Region by Educational Attainment in 1990

10. **Industry of Persons 25 Years of Age and Older-** Employed and Experienced Unemployed by Educational Attainment - 1990

11. **Educational Attainment:** Persons 25 Years of Age and Over in the Nation, Region and Sectors: 1980 and 1990

12. **Educational Attainment: Persons 25 Years and Older for Counties in New York City** 1980 and 1990

13. **Educational Attainment: Persons 25 Years and Older for Counties in NY Suburbs** 1980 and 1990

14. **Educational Attainment: Persons 25 Years and Older for Counties in NJ Suburbs** 1980 and 1990

Table 1

Educational Attainment For Persons 25 Years of Age and Older
In The Nation, Region and Sectors in 1990
(Percent Distribution)

	Nation	Region	NY City	NY Suburbs	NJ Sector
Less That 9 Years	10.4	11.2	14.1	6.4	10.5
9-12 Years, No Diploma	14.4	14.8	17.6	10.9	13.6
High School Graduate	30.0	28.0	26.3	29.6	29.4
Some College	18.7	15.2	14.4	17.3	14.8
Associate Degree	6.2	5.2	4.6	6.7	4.8
Bachelor's Degree	13.1	14.9	12.9	16.2	17.1
Master's Degree or Higher	7.2	10.7	10.1	12.9	9.8
Total	100.0	100.0	100.0	100.0	100.0
Number of Persons (Millions)	158.9	10.4	4.9	2.5	3.0

SOURCE 1990 Census of Population U S Bureau of the Census

Table 2

Educational Attainment by Race and Hispanic Ethnicity
In The Region in 1990
(Percent Distribution)

	Total	White	Black	Other Races	All Hispanics
Less That 9 Years	11.2	9.5	11.5	21.9	26.2
9-12 Years, No Diploma	14.8	12.2	23.1	18.3	23.1
High School Graduate	28.0	29.0	29.0	20.2	24.0
Some College	15.2	15.2	17.6	11.4	13.1
Associate Degree	5.2	5.0	5.7	5.0	4.2
Bachelor's Degree	14.9	16.6	8.5	14.3	5.8
Master's Degree or Higher	10.7	12.5	4.6	8.9	3.6
Total	100.0	100.0	100.0	100.0	100.0
Number of Persons (Millions)	10.4	7.4	1.8	1.2	1.5

NOTE Hispanics may be of any race

SOURCE 1990 Census of Population U S Bureau of the Census

Table 3

Poverty Status for Persons 25 Years of Age and Older
In The Region and Sectors in 1990
(Percent Below Poverty Level)

	Region	NY City	NY Suburbs	NJ Sector
Less That 9 Years	22.3	27.9	12.6	14.6
9-12 Years, No Diploma	19.4	25.4	9.7	13.1
High School Graduate	9.1	13.9	4.3	6.0
Some College	6.7	10.6	3.1	4.0
Associate Degree	5.7	9.8	2.0	3.7
Bachelor's Degree	3.4	5.6	1.7	2.1
Master's Degree or Higher	3.1	4.7	1.5	2.1
All Persons	10.0	15.1	4.2	6.4

SOURCE 1990 Census of Population U S Bureau of the Census

Table 4

Poverty Rates of Males & Females
25 Years of Age and Older
In The Region by Educational Attainment
(Percent)

Female	Male
25.7	17.6
23.9	14.1
10.3	7.4
8.0	5.3
6.1	5.1
3.5	3.3
3.3	2.3
12.0	7.7

SOURCE 1990 Census of Population
U S Bureau of the Census

Table 5

Education by Gender
For Persons 25 Years of Age and Older - *Female* **Male**
In The Region and Sectors in 1990
(Percent Distribution)

	Region		NY City		NY Suburbs		NJ Sector	
Less That 9 Years	*12.0*	10.0	*14.9*	12.7	*7.1*	5.6	*11.2*	9.4
9-12 Years, No Diploma	*14.8*	14.8	*17.3*	17.8	*10.9*	10.8	*13.7*	13.5
High School Graduate	*30.7*	24.8	*28.4*	24.0	*33.5*	25.2	*32.1*	25.8
Some College	*14.4*	16.3	*13.7*	15.6	*16.0*	18.7	*14.3*	15.4
Associate Degree	*5.6*	4.7	*5.0*	4.2	*7.2*	6.1	*5.5*	4.2
Bachelor's Degree	*13.7*	16.6	*12.2*	14.1	*14.5*	18.5	*15.6*	18.9
Master's Degree or Higher	*8.8*	12.8	*8.5*	11.6	*10.8*	15.1	*7.6*	12.8
Total	100.0	100.0	*100.0*	100.0	*100.0*	100.0	*100.0*	100.0

SOURCE 1990 Census of Population U S Bureau of the Census

Table 6

Labor Force Participation Rates by Educational Attainment
For Persons 25 Years of Age and Older
In The Region and Sectors in 1990
(Percent Distribution)

	Region	NY City	NY Suburbs	NJ Sector
Less That 9 Years	36.7	37.4	31.9	37.7
9-12 Years, No Diploma	48.6	48.0	46.4	51.3
High School Graduate	62.2	59.5	61.9	66.5
Some College	75.4	73.8	75.1	78.2
Associate Degree	79.7	79.8	79.1	80.4
Bachelor's Degree	82.7	83.4	80.5	83.7
Master's Degree or Higher	85.7	85.4	85.0	87.0
Total	65.9	63.1	67.7	68.9

Source 1990 Census of Population U S Bureau of Census

Table 7

Unemployment Rates by Educational Attainment
For Persons 25 Years of Age and Older
In The Region and Sectors in 1990
(Percent Distribution)

	Region	NY City	NY Suburbs	NJ Sector
Less That 9 Years	10.9	11.6	6.6	11.2
9-12 Years, No Diploma	11.3	13.6	7.1	9.4
High School Graduate	6.6	8.5	4.3	5.8
Some College	5.4	6.9	3.8	4.5
Associate Degree	4.3	6.1	2.8	3.3
Bachelor's Degree	3.4	4.3	2.7	2.8
Master's Degree or Higher	2.4	3.0	1.7	2.0
Total	5.8	7.6	3.6	5.0

SOURCE 1990 Census of Population U S Bureau of the Census

Table 8

Individual Income of Persons 25 Years and Over By Educational Attainment in the Region in 1990 (Percent)

	Under $15,000	15,000-$19,999	20,000-$29,000	30,000-$39,999	40,000-$49,999	50,000-$59,999	60,000-$74,999	$75,000 and over	Total	Median Income
Less That 9 Years	72.3	9.9	10.3	4.2	1.7	0.7	0.5	0.4	100.0	$10,371
9-12 Years, No Diploma	58.4	12.2	15.4	7.4	3.3	1.5	1.0	0.8	100.0	12,831
High School Graduate	40.5	13.4	21.5	12.2	6.0	3.0	1.8	1.6	100.0	18,544
Some College	27.6	11.4	23.4	15.4	9.4	5.3	3.6	3.9	100.0	24,689
Associate Degree	24.6	11.1	24.1	17.5	10.3	5.5	3.7	3.2	100.0	25,958
Bachelor's Degree	17.1	7.0	19.8	18.4	12.6	8.1	6.6	10.4	100.0	33,335
Master's Degree or Higher	12.6	4.4	12.3	15.3	14.2	11.3	9.8	20.1	100.0	43,765
Total	36.7	10.4	18.5	12.8	7.9	4.8	3.6	5.3	100.0	$21,572

NOTE This table only includes persons with cash income. It excludes income in-kind such as food stamps
SOURCE 1990 Census of Population, U.S. Bureau of the Census

Table 9

Occupation of Persons 25 Years of Age and Older Employed in the Region By Educational Attainment in 1990 (Percent Distribution)

	Managerial Professional	Technician, Sales, Clerical	Service	Precision Production Craft, Repair	Operators Fabricators Laborers	Total
Less That 9 Years	5.1	14.0	30.5	14.4	36.0	100.0
9-12 Years, No Diploma	7.1	24.4	26.6	15.0	26.9	100.0
High School Graduate	12.7	42.7	16.8	12.6	15.2	100.0
Some College	25.0	44.3	13.1	9.1	8.5	100.0
Associate Degree	34.3	41.3	10.5	8.0	5.9	100.0
Bachelor's Degree	57.1	32.1	5.0	3.0	2.8	100.0
Master's Degree or Higher	80.3	15.0	2.2	1.2	1.3	100.0
Total	31.7	33.3	13.9	8.9	12.2	100.0

NOTE This table excludes persons who have never worked or last worked prior to 1985
SOURCE 1990 Census of Population, U.S. Bureau of the Census

Table 10

Industry of Persons 25 Years of Age and Older Employed and Experienced Unemployed By Educational Attainment in the Region in 1990 (Percent)

	Construction	Manufacturing	TCPU	Wholesale Trade	Retail Trade	FIRE	Business & Repair Services	Personal Services	Entertainment, Recreation and Professional Services	Government, Including Industry	Other	Total
Less That 9 Years	8.1	30.1	6.0	4.3	17.4	3.9	6.4	7.4	13.8	1.6	1.0	100.0
9-12 Years, No Diploma	7.9	20.3	10.2	4.9	17.0	5.3	7.1	5.7	18.3	2.5	0.8	100.0
High School Graduate	6.5	15.7	12.1	5.3	15.2	10.2	5.9	3.6	20.1	4.7	0.7	100.0
Some College	5.2	13.2	11.7	5.8	12.5	12.6	6.7	2.6	22.4	6.7	0.6	100.0
Associate Degree	4.1	12.9	9.2	5.1	11.5	11.8	6.1	2.3	30.8	5.5	0.7	100.0
Bachelor's Degree	2.8	13.1	7.1	5.6	9.3	15.6	6.6	1.8	32.8	4.9	0.4	100.0
Master's Degree or Higher	1.4	8.1	3.5	2.5	3.6	10.1	3.3	0.8	62.3	4.0	0.4	100.0
Total	5.1	15.2	9.2	5.0	12.4	10.6	6.0	3.1	28.3	4.5	0.6	100.0

NOTE This table excludes persons who have never worked or last worked prior to 1985
TCPU = Transportation Communication Public Utilities
FIRE = Finance Insurance Real Estate
Other Includes Agriculture and Mining
SOURCE 1990 Census of Population, U S Bureau of the Census

Table 11

Educational Attainment: Persons 25 Years and Older in the Nation, Region and Sectors 1980 and 1990 (Percent Distribution)

	Nation		Region		Sectors					
					N.Y. City		N.Y. Suburbs		N.J. Sector	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
Less That 9 Years	18.2	10.4	19.3	11.2	23.4	14.1	12.1	6.4	18.7	10.5
9-12 Years, No Diploma	15.3	14.4	14.8	14.8	16.4	17.6	12.2	10.9	14.3	13.6
High School Graduate	34.6	30.0	33.1	28.0	30.3	26.3	36.7	29.6	34.7	29.4
Some College	15.7	24.9	13.5	20.4	12.6	19.0	16.1	24.0	12.9	19.6
College Graduate or Higher	16.2	20.3	19.3	25.6	17.3	23.0	22.9	29.1	19.4	26.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Persons (millions)	132.8	158.9	9.1	10.4	4.5	4.9	2.3	2.0	2.7	3.0

SOURCE 1990 Census of Population, U S Bureau of the Census

Table 12

Educational Attainment: Persons 25 Years and Older for Counties in New York City
1980 and 1990
(Percent Distribution)

	Bronx		Kings		New York		Queens		Richmond	
	1980	1990	1980	1990	1980	1990	1980	1990	1980	1990
Less That 9 Years	28.9	**18.5**	26.6	**15.6**	20.1	**12.4**	21.1	**12/7**	15.2	**7.2**
9-12 Years, No Diploma	20.3	**23.0**	18.5	**20.7**	11.9	**12.3**	15.8	**16.2**	16.3	**14.2**
High School Graduate	31.0	**28.2**	32.2	**28.5**	20.8	**15.9**	33.9	**29.7**	39.2	**35.1**
Some College	10.7	**18.1**	11.1	**18.6**	14.0	**17.2**	13.7	**20.8**	14.5	**22.7**
College Graduate or Higher	9.1	**12.2**	11.6	**16.6**	33.2	**42.2**	15.5	**20.6**	14.8	**20.8**
Total	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**
Number of Persons (thousands)	683	**735**	1,333	**1,458**	1,014	**1,095**	1,246	**1,350**	210	**246**

Source 1980, 1990 Census of Population, U.S. Bureau of the Census

Table 13

Educational Attainment: Persons 25 Years and Older For Counties in the New York Suburbs
(Percent Distribution)

	Nassau		Rockland		Suffolk		Westchester	
	1980	1990	1980	1990	1980	1990	1980	1990
Less That 9 Years	11.1	**6.0**	12.8	**6.4**	12.2	**5.9**	13.4	**7.9**
9-12 Years, No Diploma	11.2	**9.8**	10.6	**10.3**	14.1	**11.9**	11.4	**11.1**
High School Graduate	37.7	**30.2**	33.4	**26.1**	39.6	**32.9**	32.2	**25.1**
Some College	16.4	**24.0**	17.5	**24.3**	16.3	**26.4**	15.0	**20.6**
College Graduate or Higher	23.6	**30.0**	25.7	**32.9**	17.8	**22.9**	28.0	**35.3**
Total	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**
Number of Persons (thousands)	827	**881**	151	**170**	733	**855**	555	**605**

Source 1980, 1990 Census of Population, U.S. Bureau of Census

Table 14

Educational Attainment: Persons 25 Years and Older For Counties in the New Jersey Sector 1980 and 1990
(Percent Distribution)

	Bergen		Essex		Hudson		Middlesex	
	1980	1990	1980	1990	1980	1990	1980	1990
Less That 9 Years	14.4	**7.9**	21.0	**12.2**	29.9	**17.2**	16.0	**8.6**
9-12 Years, No Diploma	11.8	**10.5**	16.2	**17.8**	18.5	**18.7**	14.0	**12.0**
High School Graduate	35.3	**29.1**	32.3	**27.7**	31.5	**28.3**	39.0	**32.0**
Some College	14.6	**20.8**	12.5	**18.3**	8.9	**16.1**	12.9	**20.9**
College Graduate or Higher	23.8	**31.7**	18.0	**24.0**	11.2	**19.7**	18.1	**26.5**
Total	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**	100.0	**100.0**
Number of Persons (thousands)	552	**584**	511	**506**	343	**372**	355	**448**

	Morris		Passaic		Somerset		Union	
	1980	1990	1980	1990	1980	1990	1980	1990
Less That 9 Years	9.9	**5.0**	25.0	**14.9**	12.7	**5.8**	17.2	**10.7**
9-12 Years, No Diploma	9.9	**8.0**	16.7	**16.4**	10.2	**7.8**	14.2	**14.1**
High School Graduate	34.9	**27.2**	33.6	**32.1**	35.2	**26.4**	36.9	**31.2**
Some College	16.7	**23.1**	10.9	**17.9**	15.3	**21.6**	12.6	**19.0**
College Graduate or Higher	28.6	**36.7**	13.8	**18.7**	26.6	**38.4**	19.1	**25.0**
Total	100.0	**100.0**	1000.0	**100.0**	100.0	**100.0**	100.0	**100.0**
Number of Persons (thousands)	247	**284**	270	**295**	126	**168**	323	**339**

Source 1980 1990 Census of Population U S Bureau of Census

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